No. 7400011

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Norman Taylor &
University of Kentucky Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW,* THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS DESIGNATED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

*[Waived]

RED CLOVER

'Kenstar'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 17th day of May in the year of our Lord one thousand nine hundred and seventy-nine

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(2-12-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY
Kenstar	Red Clover	PVPO NUMBER 7400011
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 5-17-73 / TIME 2:00 P.M.
Trifolium pratense	Leguminosae	
	5. DATE OF DETERMINATION: March 1, 1972	FEE RECEIVED $ 750.00 / CHARGES

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Kentucky Agricultural Experiment Station	Agricultural Science Center North University of Kentucky Lexington, Ky. 40506	606-258-5176

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
University		

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Dr. Norman L. Taylor
Agricultural Science Center North
University of Kentucky
Lexington, Kentucky 40506

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 12A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52, P.L. 91-577)*
- [X] 12B. Exhibit B, Botanical Description of the Variety
- [X] 12C. Exhibit C, Objective Description of the Variety — 8/3/78
- [X] 12D. Exhibit D, Data Indicative of Novelty
- [X] 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. *(See Section 52, P.L. 91-577).*

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a), P.L. 91-577) (If "Yes," answer 14B and 14C below.)* [X] YES [ ] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations?	14C. If "Yes," to 14B, how many generations of production beyond breeder seed?
[X] YES [ ] NO	two

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the prouisions of Section 42 of the Plant Variety Protection Act (P.L. 91-577).

March 20, 1973
(DATE)

Norman L. Taylor
(SIGNATURE OF APPLICANT)

4 April 73
(DATE)

Charles E. Barnhart
(SIGNATURE OF APPLICANT)

FORM GR-470 (REVERSE)

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $50.00 fee to U.S. Dept. of Agriculture, Consumer and Marketing Service, Grain Division, Hyattsville, Maryland 20782. Retain one copy for your files. All items on the face of the form are self-explanatory unles noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety.

12a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

12b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

12c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

12d Provide complete data indicative of novelty. Seed and plant specimens may be submitted and seeds submitted may be sterile. Where possible, include photographs of plant comparisons, chemical tests, etc.

12e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

APPLICATION FOR PLANT VARIETY PROTECTION OF KENSTAR RED CLOVER

EXHIBIT A

Kenstar is a 10-clone synthetic variety selected for greater persistence under Kentucky conditions than is available in other red clover varieties. Stands of Kenstar under optimum management have lived for three to four years counting the year of sowing as the first year.

Breeding of Kenstar was begun in 1955 when approximately 1500 third-year plants of the variety Kenland were selected from fields throughout Kentucky. These and other plants from breeding nurseries were tested for agronomic and other qualities. The most productive clones were vegetatively increased and allowed to produce polycross seed. After polycross testing, the 10 clones which had the most persistent (long-lived) progenies were selected for inclusion in the synthetic. The 10 clones are maintained vegetatively to reconstitute the variety as seed is needed. Seed produced on the 10 clones is designated breeder seed as are several increases thereafter to supply adequate amounts for foundation seed production.

Although Kenstar is somewhat variable due to the heterozygous and heterogenous nature of the variety (as in all red clovers), no extreme variants have been observed, and none are recognized for the purpose of Exhibit A. Kenstar has been observed over generations and does not change in its essential characters.

EXHIBIT B

Kenstar is a medium type or double-cut red clover cultivar similar to Kenland but is longer lived persisting up to as long as four years. Kenstar also is slightly later in flowering than Kenland and flowers less profusely thus presenting a more uniform appearance under short-day conditions.

Perennial with fusiform root and shoot rootstock, strongly pubescent, 20-60 cm. Stems many, arising from the crown of basal leaves, simple or branched erect. Lower leaves long, middle and upper ones short petioled. Stipules ovate lonceolate, adnote to petiole, membranous with mostly green but some red nerves, usually hairy. Leaflets very short petioluate obovate to obovate-oblong, almost toothless, appressed hairy beneath often V-marked but absence of leafmark more frequent than in Kenland. Heads terminal, solitary or rarely in pairs, globular, mostly involucrate by the stipules of the diminished leaves. Flowers (florets) up to approximately 125. Calyx tubular companulate, 10 nerved, whitish green sometimes with a reddish tint, often appressed hairy; throat with a slight annular hairy thickening; teeth unequal, the lower one longer than the tube and than the other ones. Corolla reddish purple to pink, rarely almost white. Standard longer than wings and keel, notched. Ovary 2 (1) ovuled. Pod ovoid, membranous with a cartilaginous shining upper part. Seed 1, oblong-ovoid, tuberculate, yellow, brownish, or violet.

Data obtained in 1978 on red clover varieties established as spaced plants in the field on April 12, 1978

Accession No.	Variety	6-26 Plants flowering (Score)[1/]	6-26 Height of plant (cm)	6-26 Flowering stems (No.)	6-26 Internodes (No.)	7-7 Hairiness (Score)[2/]
49-L38-96	Kenland Br.	0.54 bc	47.9 b	9.1 a	8.3 ab	0.96
49-L38-1554	Kenstar Br.	0.44 cd	42.8 cd	7.8 b	7.9 bc	0.92
49-L38-1579	Arlington	0.41 d	35.0 e	8.3 b	7.1 d	0.97
69-L38-1590	Redland	0.59 b	42.9 cd	8.0 b	8.0 bc	0.94
69-L3-1583	Redman	0.42 cd	45.5 bc	8.3 b	7.8 bc	1.00
Significance level		.01	.01	.01	.01	N.S.

1/ 0 = not flowering, 1 = flowering

2/ 0 = smooth, 1 = hairy

Continued. Data obtained in 1978 on red clover varieties established as spaced plants in the field on April 12, 1978

Accession No.	Variety	7-7 Leafmark (Score)[3/]	7-10 Erectness (Score)[4/]	7-11 Flower Color (Score)[5/]	7-17 Mildew resistance (Score)[6/]	7-19 Seed Color (Score)[7/]
49-L38-96	Kenland Br.	0.77 bc	2.54 c	3.00	3.18 c	2.56 a
49-L38-1554	Kenstar Br.	0.86 ab	2.67 bc	3.03	2.75 c	1.77 b
49-L38-1579	Arlington	0.80 abc	2.67 bc	2.88	1.22 e	2.65 a
69-L38-1590	Redland	0.88 a	2.52 c	2.94	3.69 b	2.52 a
69-L3-1583	Redman	0.69 c	2.58 bc	2.99	2.16 d	2.65 a
Significance level		.01	.01	N.S.	.01	.01

3/ 0 = no leafmark, 1 = leaf marked

4/ 1 = 0-30° (prostrate), 2 = 30-45° (semi-prostrate), 3 = 45-60° (semi-erect), 4 = 60-90° (erect)

5/ 1 = white, 2 = light pink, 3 = medium pink, 4 = dark pink, 5 = red

6/ 1 = most resistance, 9 = least resistance

7/ 1 = yellow, 2 = yellow with some purple, 3 = purple with some yellow, and 4 = purple

Percent survival of varieties of red clover sown March 15, 1955 inoculated at first bloom with a spore and mycelial suspension of Colletotrichum trifolii and counted July 18, 1955.

Accession No.	Variety	% Survival*
FC32012	Stevens**	67.3
FC24094	Bagne	37.1
FC24658	Sanford	56.6
FC24659	Van Atta	60.1
FC24671	Liebel	60.7
39-L38-75	Kentucky 215	72.2
FC32011	Reinholdt	64.1
FC32065	Dollard	33.6
FC24537	Tenn. Purple Seeded	77.0
FC32002	Pennseolt	45.0
FC24664	Rahn	43.8
FC24662	Van Fossen	26.1
FC13274	Wisc. Mildew Resistant	32.0
FC24618	Port Gibson	47.9
FC24686	Purdue	39.5
FC24037	Ottawa	39.9
FC24670	Wegener	13.2
39-L38-29	Kenland	83.0

* 100 plants in each of four replications originally. Inoculated in greenhouse at Lexington, Kentucky.

** Experimental name for 'Chesapeake'

Table 1. Forage production and stands, 1970-71, of red clover varieties sown April 25, 1969, in Caldwell County, Kentucky.

Variety	Dry Matter Yield (Tons/A) 1970*	5-17-71**	Stand (%) 6-2-70	5-10-71
Kenstar	3.75 a***	0.76 a	60.0 a	37.7 a
Chesapeake	3.44 a	0.08 c	43.8 a	0.8 c
Barzen	3.02 b	0.00 c	51.3 a	0.0 c
Kenland	3.48 a	0.35 b	50.1 a	14.0 b

* Total of three harvests in second year of stand
** First cutting only, second cutting not measured because of volunteer seedlings.
*** Means within a column with the same letter not significantly different according to Duncan's Multiple Range Test at 5% level of probability.

Table 2. Forage production and stands of red clover varieties in Caldwell County, Kentucky, 1967, sown April 7, 1965.

Variety	Dry Matter Yield (Tons/A) 6-12-67	7-25-67	Stand (%) 7-25-67
Kenstar	1.35 a*	1.10 a	72.9 a
Common (Ky produced)	0.32 c	0.35 c	5.9 c
Kenland	0.50 b	0.64 b	26.6 b

* Means within a column with the same letter not significantly different according to Duncan's Multiple Range Test at 5% level of probability.

Table 3. Forage production of red clover varieties at Jackson and Knoxville, Tennessee.*

Variety	Dry Matter Yield (Tons/A) Jackson** 1969	1970	1971	Knoxville*** 1970	1971
Kenstar	5.34	3.76	1.36	3.53	1.44
Kenland	3.95	2.81	0.00	3.00	0.62
Barzen	3.91	2.42	0.00	----	----
LSD .05	0.48	0.52	0.15	0.36	0.28

* Data provided courtesy of Department of Agronomy, University of Tennessee
** Sown fall 1968.
*** Sown fall 1969.

FORM GR-470-42
(9-77)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN AND SEED DIVISION
BELTSVILLE, MARYLAND 20705

Red Clover

OBJECTIVE DESCRIPTION OF VARIETY
RED CLOVER *(Trifolium Pratense)*

NAME OF APPLICANT(S)
Norman L. Taylor, University of Kentucky

VARIETY NAME OR TEMPORARY DESIGNATION
Kenstar

ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code)*
Department of Agronomy, Agricultural Sci. Bldg. North
Lexington, KY 40506

FOR OFFICIAL USE ONLY
PVPO NUMBER
7400011

Place the appropriate number that describes the varietal character of this variety in the boxes below. Fill unused columns with zeros (e.g. [0][9][9] when number is 99). In comparisons to standard varieties, the value [0][0] should only be used to indicate that the varieties are equal. The symbol (.) indicates a decimal point. Characteristics described, including numerical measurements, should represent those which are TYPICAL for the variety. Measured data should be for SPACED PLANTS. Any recognized color fan, e.g. Royal Horticultural Colour Chart, may be used to determine plant colors; designate system used: _____. Give location of test area _____. Ranges of values are valuable and may be included with additional description elsewhere in the application.

NOTE: *For single plant data a minimum of 100 plants is suggested.*

1. TYPE:

[1] 1 = DOUBLE CUT (medium) 2 = SINGLE CUT (mammoth) 3 = OTHER *(Specify)* _____

2. PLOIDY:

[1] 1 = DIPLOID 2 = TETRAPLOID 3 = OTHER *(Specify)* _____

3. PRODUCTIVE PERSISTENCE (Usual duration of planting):

[3] 1 = ANNUAL 2 = BIENNIAL 3 = SHORT LIVED PERENNIAL (3 - 4 Years)

4. ADAPTATION: (e.g., [0][2][3] = northcentral and southcentral)

[4][3][1] 1 = NORTHEAST 2 = NORTHCENTRAL 3 = SOUTHCENTRAL
4 = SOUTHEAST 5 = WEST 6 = OTHER *(Specify)* 5 for Seed Production

STANDARD VARIETIES
1 = KENSTAR 2 = ARLINGTON 3 = ~~PENNSCOTT~~ Redman 4 = ~~KENSAS~~ Redland 5 = ~~ALTASWEDE~~ Kenland

5. MATURITY:

[4][3.][5] % PLANTS FLOWERING IN SEEDLING YEAR on 6-26-78

Beginning of spring growth:

[ ][ ] DAYS EARLIER THAN . . . . . [ ] STANDARD VARIETY
[ ][ ] DAYS LATER THAN . . . . . [ ] STANDARD VARIETY

Not applicable for transplanted spaced plants

~~Time of flowering (50% of plants in bloom): (from spring growth in non-seedling year)~~
% plants flowering on 6-26-78

[16.][7] ~~DAYS EARLIER THAN~~ % less than [5] STANDARD VARIETY
[2.][3] ~~DAYS LATER THAN~~ % more than [2] STANDARD VARIETY

6. PLANT HEIGHT (from soil level to top of flowering head at 50% flowering)

[4][3] CM. TALL
[0.][1] CM. SHORTER THAN [4] STANDARD VARIETY Redland
[7.][8] CM. TALLER THAN [2] STANDARD VARIETY Arlington

7. FLOWERING STEM (from first noncontracted internode, longer than 0.5 cm., to tip of flowering head):

7.8 NO. FLOWERING STEMS PER CROWN

7.9 NO. INTERNODES

43 CM. LENGTH OF STEM

Hairiness: Give percentage of plants with each type of surface (Total = 100%)

000 % HAIRS PROJECTING UPWARD

895 % HAIRS PROJECTING DOWNWARD OR AT RIGHT ANGLES All at right angles except glabrous

10.5 % GLABROUS (FEWER THAN 5 HAIRS/1 CM. PATH ALONG CENTRAL INTERNODES)

Habit: Give percentage of plants with each type of habit. Stem habit should be determined by the angle of lowest stems to the horizontal (soil level) at 50% flowering.

06.5 % PROSTRATE *(0 - 30°)* | 37.1 % SEMI-PROSTRATE *(30 - 45°)* | 39.5 % SEMI-ERECT *(45 - 60°)* | 16.9 % ERECT *(60 - 90°)*

8. LEAF (Central leaflet at 3rd node below flowering head):

Not measured, no difference observed

MM WIDTH

MM NARROWER THAN ..... STANDARD VARIETY

MM WIDER THAN ..... STANDARD VARIETY

MM LENGTH

MM SHORTER THAN ..... STANDARD VARIETY

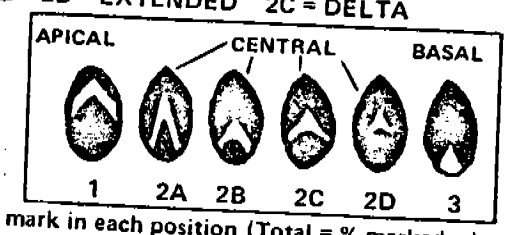
MM LONGER THAN ..... STANDARD VARIETY

Color:

No difference observed

1 = LIGHT GREEN *(Altaswede)* | 2 = MEDIUM GREEN *( )* | 3 = DARK GREEN *(Hungaropoli)* | 4 = BLUE GREEN *( )*

Leaf Marking (at 50% flowering): NOTE: Categories below allow for increasingly detailed description of the same data. Diagram illustrates terms: 1 = APICAL 2A = FULL 2B = EXTENDED 2C = DELTA 2D = INCOMPLETE 3 = BASAL



Presence of Mark: Of total plants, give percentage marked and unmarked (Total = 100%)

15.3 % ABSENT | 84.7 % MARKED

Position of Mark: Of total plants, give percentage with leaf mark in each position (Total = % marked, above)

% APICAL | % CENTRAL | % BASAL No differences observed

Shape of Mark: Of total plants, give percentage with central leaf marks having each shape (Total = % central above)

% FULL | % EXTENDED | % DELTA | No differences observed % INCOMPLETE

9. FLOWER COLOR (Determine color on freshly opened florets): Give percentage of plants with each color (Total = 100%). Colors are referenced to the Munsell Color System.

000 % WHITE

91.7 % MEDIUM PINK (5RP 7/6)

000 % RED (5RP 5/10)

03.7 % LIGHT PINK (5RP 8/4)

04.6 % DARK PINK (5RP 6/8)

000 % OTHER *(Specify)* _____

10. SEED COLOR: Maximum color development in unstored, mature seed (at beginning of calyx browning). Give percentage of plants with each seed color (Total = 100%)

37.8	% YELLOW	49.0	% YELLOW WITH SOME PURPLE
01.0	% PURPLE	12.2	% PURPLE WITH SOME YELLOW
000	% OTHER *(Specify)* _____		*(attach explanation)*

11. DISEASE AND INSECT RESISTANCE (0 = not tested, 1 = susceptible, and 2 = resistant). If variety is claimed to be resistant or to show intermediate reaction, substantiating test scores should be attached clearly identifying disease, application variety, check varieties, date and location of test, and range and direction of test scores.

A. DISEASES:

- ☐ CROWN ROT *(Sclerotina trifoliorum)*
- ☐ NORTHERN ANTHRACNOSE *(Kabatiella caulivora)*
- ☐ SOUTHERN ANTHRACNOSE *(Colletotrichum trifolii)*
- ☐ TARGET SPOT *(Stemphylium sarcinaeformae)*
- ☐ PEPPER SPOT *(Leptosphaeralina trifolii)*
- ☐ RED CLOVER VEIN MOSIAC VIRUS
- ☐ NEMATODE *(Specify)* _____
- ☐ ROOT ROT *(Fusarium spp.)*
- ☐ SUMMER BLACK STEM *(Cercospora zebrina)*
- ☐ BLACK STEM *(Phoma trifolii)*
- ☐ POWDERY MILDEW *(Erysiphe polygoni)*
- ☐ BLACK PATCH *(Rhizoctonia leguminicola)*
- ☐ BEAN YELLOW MOSIAC VIRUS
- ☐ OTHER *(Specify)* _____

B. INSECTS:

- ☐ CLOVER ROOT BORER *(Hylastinus obsurus)*
- ☐ SWEETCLOVER WEEVIL *(Sitona cylindricollis)*
- ☐ LESSER CLOVER LEAF WEEVIL *(Hypera nigrirostris)*
- ☐ YELLOW CLOVER APHID *(Therioaphis trifolii)*
- ☐ CLOVER SEED MIDGE *(Dasineura leguminicola)*
- ☐ CLOVER LEAFHOPPER *(Aceratagallia sanguinolenta)*
- ☐ CLOVER ROOT CURCULIO *(Sitona hispidula)*
- ☐ CLOVER SEED CHALCID *(Bruchophagus platyptera)*
- ☐ POTATO LEAF HOPPER *(Empoasca fabae)*
- ☐ MEADOW SPITTLE BUG *(Philaenus spumarius)*
- ☐ PEA APHID *(Acrythosiphon pisum)*
- ☐ OTHER *(Specify)* _____

12. Indicate the variety most closely resembling the application variety for the following:

CHARACTER	VARIETY	CHARACTER	VARIETY
LEAFLET SHAPE	Kenland	SEED COLOR	None like Kenstar
CUTTING RECOVERY	Kenland	LATE SEASON GROWTH	Kenland
WINTER HARDINESS	Kenland	PERSISTENCE	Kenland

REFERENCES:

Hawkins, R. P. 1953. Investigations on local strains of herbage plants II. Types of red clover and their identification. J. Brit. Grassland Soc. 8, 213-218.

Williams, R. D. 1927. Red clover investigations, 1919 - 1926. Welsh Plant Breeding Station Bull., Ser. H. No. 7.

COMMENTS: (If additional space is necessary, use reverse side)

EXHIBIT D

Novelty is based on lack of purple seed in the cultivar Kenstar as compared to Kenland, its most similar variety (See Table 1). No varieties tested were as nearly lacking in purple seed as Kenstar.

Table 1. Seed color of red clover varieties scored on a scale of 1 = yellow, 2 = yellow with some purple, 3 = purple with some yellow, and 4 = purple.

Variety	Score
Kenland	2.56 a*
Kenstar	1.77 b
Arlington	2.65 a
Redland	2.53 a
Redman	2.65 a

* Means with the same letter do not differ significantly at 5% level according to Duncan's Multiple Range Test.

Table 1. Seed color of red clover varieties scored on a scale of 1 = yellow, 2 = yellow with some purple, 3 = purple with some yellow and 4 = purple.

Variety	Score
Kenland	2.56
Kenstar	1.77**
Arlington	2.65
Redland	2.53
Redman	2.65

** Significantly less purple colored seed based on F-test (LSD) at 1% level (F= 17.72).

EXHIBIT E

Statement of Basis of Applicant's Ownership

I, Norman L. Taylor, Professor of Agronomy, a plant breeder employed by the Kentucky Agricultural Experiment Station, University of Kentucky, Lexington, Kentucky, since July 1953, have bred the Kenstar cultivar of red clover and all rights to said variety reside in my employer, the Kentucky Agricultural Experiment Station.

Norman L. Taylor

Norman L. Taylor

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
Grain and Seed Division
National Agricultural Library
Beltsville, Maryland 20705

SEP 27 1977

PLANT VARIETY PROTECTION OFFICE

Gentlemen:

Subject: Application No. 7400011
Variety and Kind - 'Kenstar' -- Red Clover

As provided in section 83(a) of the Plant Variety Protection Act, 7 U.S.C. 2321, we request that the Certificate on the above variety be issued with a notation on each Certificate that the right to exclude others from selling, offering for sale, reproducing, importing or exporting the variety covered by this Certificate, or using it in producing a hybrid or different variety is waived.

It has been agreed that the certificate should be issued in the name(s) of:

Norman L. Taylor

Kentucky Agricultural Experiment Station, University of Kentucky

& as per letter of 2/6/78

12-13-77
(Date)

Norman L. Taylor
(Signature)